

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended): A variable field of view optical system comprising:
a forward curved optical element;
a rearward optical element comprising an axially gradient index material;
a curved focal surface; and
means for conveying an image on said curved focal surface to a flat detector surface,
wherein said means comprises a plurality of optical fibers, and wherein said fibers are concentrated more
densely in a center of said focal surface than in a periphery of said focal surface.

Claim 2. (currently amended): The system of claim 1 wherein said forward curved optical element comprises a ½ ball lens.

Claim 3. (original): The system of claim 1 wherein said conveying means comprises a backward curving or hollow field relay lens.

Claims 4 & 5. (canceled).

Claim 6. (currently amended): The system of claim [[4]] 1 wherein said fibers are mounted normal to said curved focal surface.

Claim 7. (original): The system of claim 1 wherein said rearward optical element comprises a dynamic index material.

Claim 8. (original): The system of claim 7 wherein said dynamic index material comprises an electroactive hydrogel.

Claim 9. (original): The system of claim 1 wherein said system provides simultaneous wide field of view with a lower resolution and narrow field of view with higher resolution.

Claim 10. (original): The system of claim 9 wherein said system comprises substantially no moving parts.

Claim 11. (currently amended): A variable field of view optical method comprising the steps of:

- providing a forward curved optical element;
- providing a rearward optical element comprising an axially gradient index material;
- providing a curved focal surface; and
- conveying an image on the curved focal surface to a flat detector surface with a plurality of optical fibers which are concentrated more densely in a center of the focal surface than in a periphery of the focal surface.

Claim 12. (currently amended): The method of claim 11 wherein the forward curved optical element comprises a ½ ball lens.

Claim 13. (original): The method of claim 11 wherein conveying comprises employing a backward curving or hollow field relay lens.

Claims 14 & 15. (canceled).

Claim 16. (currently amended): The method of claim [[14]] 11 wherein the fibers are mounted normal to the curved focal surface.

Claim 17. (original): The method of claim 11 wherein the rearward optical element comprises a dynamic index material.

Claim 18. (original): The method of claim 17 wherein the dynamic index material comprises an electroactive hydrogel.

Claim 19. (original): The method of claim 11 wherein the method provides simultaneous wide field of view with a lower resolution and narrow field of view with higher resolution.

Claim 20. (original): The method of claim 19 wherein the method employs substantially no moving parts.

Claim 21. (new): An optical system for conveying an image to an image sensor comprising:
fiber optic cable for conveying images to the image sensor, wherein the fiber optic cable comprises a plurality of optical fibers and said optical fibers are more densely concentrated at the center of the image sensor.

Claim 22. (new): The optical system of claim 21 wherein the system further comprises a forward curved optical element.

Claim 23. (new): The optical system of claim 22 wherein the forward curved optical element comprises a $\frac{1}{2}$ ball lens.

Claim 24. (new): The optical system of claim 22 further comprising a rearward optical element comprising an axially gradient index material.

Claim 25. (new): The optical system of claim 21 further comprising a curved focal surface;

Claim 26. (new): The optical system of claim 22 wherein the fibers are mounted normal to the curved focal surface.

Claim 27. (new): The system of claim 24 wherein said rearward optical element comprises a dynamic index material.

Claim 28. (new): The system of claim 27 wherein said dynamic index material comprises an electroactive hydrogel.

Claim 29. (new): The system of claim 1 wherein said system provides simultaneous wide field of view with a lower resolution and narrow field of view with higher resolution.